

2.2 Adding Integers

Ex. Add: $5 + 3$

Ex. Add: $-5 + (-3)$

Ex. Add: $-5 + 3$

Ex. Add: $5 + (-3)$

Addition Rule

To add two numbers,

1. Same sign, add the numbers and keep the common sign.
2. Different sign, subtract the numbers (Large – Small) and keep the sign of larger number.

Ex 1. Perform indicated operations.

a. $9 + (-12) + (-30) + 4$

b. $-54 + 20 + (-2) + 7$

c. $5 + (-3) + 12 + (-14)$

d. $6 + (-2) + (-15) + 2 + (-19)$

* Evaluating Algebraic Expressions

1. Substitute the value of variable(s) into expression.
2. Perform indicated operations.

Ex 2. Evaluate $x + 3y$ for $x = -6, y = 2$.

Ex 3. Evaluate $r + 2s + t$ for $r = -7, s = 4, t = -13$.

Ex 4. If the temperature was -7° Fahrenheit at 6 a.m., and it rose 4 degree by 7 a.m. and then rose another 7 degrees in the hour from 7 a.m. to 8 a.m., what was the temperature at 8 a.m.?

Ex 5. Suppose a diver dives from the surface to 248 meters below the surface and then swims up 8 meters, down 16 meters, down another 28 meters, and then up 32 meters. Find the diver's depth after these movements.

Ex 6. Find the sum of -49 , 14 , -28 , and 92 .